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Analysis of Soybean's Marketing Power to Support the Enhancement of Production in Central Java

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Abstract

Soybean is one of the strategic commodities in Indonesia. Various internal and external constraints are found in Indonesia's soybean production. This study aims to analyze the marketing power for supporting the enhancement of soybean production in Central Java. The location selection was done purposively in Grobogan and Wonogiri Districts which are soybean centers in Central Java. The study was conducted in 2014 through a focus group discussion (FGD) approach involving 17 key persons. The data obtained were analyzed using SWOT analysis. The result of SWOT analysis shows that soybean strength priorities in marketing to support the enhancement of soybean production in Central Java are (1) developing seed center to manage the availability of soybean needs in Central Java, including to develop and improve the quantity and quality of soybean produced by the farmers. , (2) soybeans price change based on its quality attributes (3) restriction for importing soybeans to stimulate local soybean cultivation; (4) requiring local soybean promotion agencies to explore potentials and educate the industry and community about local soybeans, (5) group learning and development for the farmer to obtain the best soybean prices, (6) soybean purchasing program at the local government production center for the local soybean processing industry.

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INTRODUCTION

Soybean is one of the strategic commodities, preceded by rice and corn. Although this plant has never been the main source of food compared to rice, soybean is still deemed to be strategic since it is an affordable source of vegetal protein, has a high economic value, and significantly sought after by people to fulfill their nutrition needs. (Direktorat Pasca Panen Tanaman Pangan, 2012). For Indonesian, soybean becomes the source of raw material for tofu, tempe, soy sauce, and livestock food industries, and Indonesia is the largest tempe producer in the world and the largest market of soybean in Asia (BPS, 2017).

Acknowledging that the role of soybean is strategic, rest assured that the demand of soybean every year increases alongside the surge of population in Indonesia. This continuous demand enables the domestic production of soybean. In 2016, the production of soybean stood at 859.653 tons of dried seeds (BPS, 2017), and according to prediction figure in 2017, national production of soybean was at 542.446 tons and a plunge of production number occurred between the year of 2016 and 2017 at 36,90. The direct consumption of soybean was approximately 1,8 million tons (Susenas, 2017), hence the production of soybean within the country only can cover approximately 50% of consumption. Therefore, there is still a deficit of soybean every year forecasted to be at the number of around 1,05 million tons, in which it needs to be fulfilled by imports (BPPP, 2014).

The dependence towards imported soybean will affect the national economy, and if this condition continues, it may threaten national resilience status and disturb social, economic, and political stability, thus followed by people's welfare to be at stake (Supadi, 2009). Budi and Aminah (2010) stated that soybean self-sufficiency becomes essential due to two reasons: (1) social and economic aspects will be affected due to the decrease of soybean production demand, looking at the fact that soybean is an affordable source of protein sought by people; and (2) the position of the country will be weak with the possibility of impact to wider aspects because of self-sufficient inability. This condition will also deplete the nation's foreign exchange. Soybean self-sufficiency is also essential to support agroindustry, improve employment opportunities, and save nation's foreign exchange (Supadi, 2009).

To solve the problem, Agricultural Ministry has issued policy concerning the state of soybean self-sufficiency. The instrument of this policy is implemented by conducting Mass Intensification Program (Inmas), Special Intensification Program (Insus), Sekolah Lapang Pengelolaan Tanaman Terpadu/ SL PTT (Field Educational Institute of Integrated Agriculture Management), and the expansion of plantation areas (PAT). Nevertheless, the policy implementation specifically in regards of soybean cultivation development still faced with some obstacles as follow: (1) the problem of high level of soil acidity on the expansion of new plantation areas, (2) the high risk of erosion on the new plantation areas due to the bumpy or hilly texture of the land, (3)

the limited availability of prime seedlings with both sufficient quantity and precise quality of time as per demands, (4) the limited ability of farmers to access technology, and (5) the low price within the level of farmers (Sudaryanto et al., 2001).

Due to some obstacles mentioned, the price becomes both an interesting and classical problem which affects farmers' decision to produce soybean (Darmadjanti, 2005). In some cases, farmers have a low bargaining power hence the price is determined by sellers one-sidedly (Rante, 2013). This phenomenon also occurs in Central Java, in which soybean production is centered to Grobogan Regency and Wonogiri Regency that experience the lack of production issue to fulfill the needs of industries where soybean becomes the source of raw material. This results in the use of imported soybean to support the demand. The dependency to imported soybean is caused by the fact that soybean within local production scale is only planted at least two times per cultivation seasons, hence the demand is more likely to increase every time. Therefore, there is a relatively high gap between demand and production, resulting the need to turn to imported

soybean as the alternative to fulfill the need of soybean industries.

Many discussion and research had been done to tackle this problem concerning soybean commodity. The aim of this research is to analyze to what extent is the power of soybean marketing to support the enhancement of soybean production in Central Java, hence it is expected to retrieve policy recommendation to improve the production of soybean in Central Java.

METHODS

The research was conducted in Grobogan and Wonogiri Regency in the year of 2014. The location was selected purposively since the two regency were the central production of soybean in Central Java. This location was expected to represent the soybean agribusiness description due to its wide outreach of contribution given by the two regencies to Central Java.

Two types of research data obtained were as follow: (1) Primary data obtained from Focus Group Discussion (FGD) and interview with keypersons including a range of topics such strengths, weaknesses, opportunities, and threats formulation to improve soybean production in Central Java, (2) Secondary data from BPS, Agricultural Institution (Dinas Pertanian of Grobogan regency and district's monography data.

The samples are 17 keypersons involving governmental bodies: Dinas Pertanian Tanaman Pangan dan Hortikultura Provinsi Jawa Tengah (Agricultural Agency for Crops and Horticulture in Central Java), Dinas Koperasi dan UMKM Provinsi Jawa Tengah (The union and UMKM Agency of Central Java), Balai Pengawasan dan Sertifikasi Benih Jawa Tengah, BPSB (Supervision and Seedling Certification Association), Badan Ketahanan Pangan Jawa Tengah, BKP (Food Resilience Board), Balai Karantina Pertanian Kelas 1 Semarang (Agriculture Quarantine Level 1 Semarang), Dinas Pertanian Tanaman Pangan dan Hortikultura Kabupaten Grobogan (Agircultural Agency for Crops and Horticulture of Wonogiri Regency), Dinas Pertanian Tanaman Pangan dan Peternakan Kabupaten Pati (Agriculture Agency for Crops and Livestocks of Pati Regency),Bulog Divisi Regional Jawa Tengah(BulogCentral Java Regional Division); and Private bodies such as: Koperasi Pengrajin Tahu Tempe Indonesia, KOPTI (The Union of Tofu and Tempe Producer in Indonesia), tofu/tempe entrepreneurs, seeds entrepreneurs, and soybean farmers.

SWOT Analysis

SWOT analysis utilized in this research is the identification of factors systematically to formulate company's strategies (Rangkuti, 2005). The use of this analysis method is based on the logic to enhance strengths and opportunities, but at the same time minimize weaknesses and threats. After identifying both internal and external factors, categorized in strengths, weaknesses, opportunities, and threats, then the strategies can be determined to reap benefits from the opportunities available, as well as to minimize or even eradicate the threats. The strengths of organization are the positive sides of the organization/community itself that can guide toward wider opportunities utilized to develop the business. The weaknesses of organization are what the organization is lacking in regards of the skill and resources. SWOT matrix helps the formulation of alternatives or strategies according to the combination between the four factors; strengths, weaknesses, opportunities, and threats by the development of four types of strategies, as follow: SO (Strengths – Opportunities), WO (Weaknesses – Threats), ST (Strengths – Threats), and WT (Weaknesses – Threats) (Rante, 2013) as depicted by Table 1.

The collected data by FGD are identified and analyzed using SWOT analysis method. The analysis begins with identifying aspects of strengths and weaknesses.

RESULT AND DISCUSSION

The identification of internal and external constrains in soybean production requires the knowledge of soybean's strengths on the market to enhance soybean production in Central Java. The analysis of internal and external factors employed SWOT analysis method. The findings of identification process through FGD showed

that soybean is divided into two focus which are soybean germination for seeds and local soybean cultivation to control imported soybean. Both focuses are inseparable because soybean produced in production central is also divided into two, soybean germination for seeds and consumption.

Soybean Germination (Seeds-Based Business)

The abundant natural resources potential is not enough to boost farmers' interest or entrepreneurs in soybean germinations business. Central Java has the land potential of 1.7754.297 ha that is suitable to cultivate soybean by the form of paddy fields, dry land (farm, mixed farm, and plantation), and abandoned dry land (bushlands, scrubbed bushes, and grass fields (BBSDLP, 2008). That means the land potential to increase soybean production is still available though very competitive.

Governmental supports are vital to optimize the available land. The distinct varieties of soybean are one of the government's measures to support soybean germination. Until the year of 2011, government had released 73 prime soybean varieties with abundant superiority (Balitkabi, 2012), in which more than 15 varieties are developed for soybean germination around Indonesia. However, Grobogan, Anjasmoro, and Malika varieties are among the most sought after by farmers for soybean plantings (Fachrudin, 2000). According to the research by Bastuti (2014), the use of Grobagan variety in soybean germination in Central Java reached 71,34% and the rest were Anjasmoro and Wilis varieties. Prime varieties are the innovation of technology that are easily adopted by farmers and are giving a significant contribution (Marwoto, 2005).

Table 1. SWOT Matrix

IFAS / EFAS	Opportunities External Factors Analysis of Strengths	Threats External Factors Analysis of Threats
Kekuatan (Strength) Internal Factor Analysis of Strengths	SO Strategy – Comparative Advantage Creating strategies using strengths to determine opportunities	ST Strategy – Mobilization Creating strategies to minimize weaknesses by utilizing opportunities
Weaknesses InternalFactorAnalysis of Strengths	WO Strategy – Disinvestment/ Investment Creating strategies using strengths to avoid threats	WT Strategy – Damage Control Creating strategies to minimize weaknesses by avoiding threats

The limited number of soybean seeds germination entrepreneurs is one of the obstacles urgently needed to be solved. Government has attempted to boost the number of seeds germination entrepreneur for soybean, whereas in the year of 2017 and 2018, 50% of the allotted soybean cultivation in the year of 2017 went to seeds germination, quality test assistance for seeds certification, seeds storage facilities, transport assistance for seeds supervising officer, and coaching for productivity improvements of self-maintained soybean plantation (DitJend Tanaman Pangan, 2015).

Some notable obstacles in seeds germination business are the limited capital, limited facilities and infrastructures, unsustainable production, difficulty in determining markets' needs and fear of failures. The minimum profit reaped by the business owners compared to rice results in the lack of interest toward soybean seeds germination business (Sudaryanto and Swastika, 2016). Looking at this condition, measures are necessary to boost the business interest through farmer communities by building networking system of seeds certification in between seasons and between regions (jabalism). Therefore, seeds

germination recommendation becomes essential to be implemented by farmers/farmers' union who will start this business. According to Suyamto (2011), solving the problem concerning the seeds germination business requires the support of human resources to perform revitalization of seeds germination through research and innovation development.

The higher price of soybean seeds compared to consumable soybean should be the thruster of the number of entrepreneurs that produce seeds to be germinated. In fact, the higher demand of seeds has not been fulfilled yet. According to Hartawan (2017), the majority of farmers in Indonesia used seeds from their own harvest on the previous harvesting season, from other farmers from the same or different regions, or from purchasing to sellers who obtained the seeds from other regions and from the previous harvesting season (jabalism). The system of jabalism, has developed due to the nature of soybean that is easily decayed and the power of sprouting is easily decreasing, and the difference of agriculture climate or harvesting seasons between regions (Saleh, 2008). Unfortunately, the drawbacks of jabalism system is the lack of quality control consideration which is predicted to significantly contribute to the lower production and productivity of soybean in the level of farmers (Nugraha et al. 1995).

Table 2. SWOT Analysis of Seeds Germination in Production Central in Central Java

Internal Factors	
Strengths	Weaknesses
The availability of sufficient natural resources	Limited facilities and infrastructure on the site
Governments support	Limited capital
The simplicity of seeds germination recommendation	Unsustainable production
	Limited seeds germination entrepreneurs
The availability of wide areas	The difficulty in predicting the markets' needs
The availability of planting season	
Seeds germination has a fully-equipped facilities	Fear of risks
Seeds cultivation innovation	
External Factors	
Opportunities	Threats
High demands	Pests
The availability of PAT program	Farmers prefer Jabal seeds, freshly cultivated
Higher price of seeds	Limited seeds resource
Collaborations between seeds germination entrepreneurs	Damaged irrigation
	Long process of certification and the short period of validity (3 months)
	Unstable price
	Abundance seeds available

The high demand of soybean seeds is due to the implementation of the government program is one of the opportunities to improve the existence of seeds germination entrepreneurs. According to Purba (2013), farmers who use labeled seeds generally received seeds through government assistance or result of collaboration with government body/private (66,7%), while the rest are from their own crops/saved seeds (33.3%). Looking at the condition, coaching program and support from all involving institutions are necessary to increase the interest of seeds entrepreneurs and to increase the ease to obtain good quality seeds which eventually profiting to the entrepreneurs themselves.

The external factors as the threats toward the existence of seeds germination based on the FGD result are pests, climate anomaly, limited seeds resources, damaged irrigation, and long process of certifications but short validity period. According to Rasyid (2013), to obtain good quality seeds, some requirements that need attention are the selection of area which has a suitable climate, the soil fertility, availability of water, free from pests and weeds, planted within a precise distance, and the precise period of harvest and drying process until the water content is approximately 10%. The limited source of seeds on the site is caused by the disconnection of seeds production chain (Garnowo, 2016) and the lack of socialization hence farmers adopt less prime quality of seeds (Deptan, 2006).

The Development of Local Soybean to Control the Volume of Imported Soybean

The rocketing demand of consumable soybean has yet resulted to the triumph of soybean within the country. The high natural resources potential should enable the fulfillment of soybean demand within the country, in fact, soybean harvest in Central Java within the last five years dipped as big as 4,09% (Pusdatin, 2016). This condition is due to the plunging participation of farmers in cultivating soybean as a result of unsatisfactory result from the cultivation (Zakaria, 2010)

Based on the opportunities point of view, soybean seeds business has some aspects that can be done as an effort to increase soybean production. Soybean seeds business in Sulawesi Tenggara has a good development prospect, since it generates a hefty profit financially at around MBCR 4,65 (Abidin and Harnowo 2010). The huge profit obtained by seeds germination business in Bali by R/C ratio is 3,07 (Suardana, 2016). This business can be a profitable business if being done in Central Java since both season and geographical condition are very supportive to cultivate soybean (Sutrisno, 2015).

Table 3. SWOT Analysis of Local Soybean Development to Control Imported Soybean

Internal Factors Strengths	Weaknesses
The tremendously high demand of soybean Some local businesses that are feasible to be developed Farmers cansell soybean to any seller without contract binding 3 harvesting seasons are available	The implementation of soybean HPP Rp. 7.600 is not maximally impacting farmers Businesses with the tendency to injure local farmers Soybean cultivation is still done traditionally Unavailability of institutional body within the level of farmers High rainfall tendency especially during harvest season
External Factors Opportunities	Threats
Some farmers are involved in the marketing community to obtain maximum price of soybean A relatively high profit margin for intermediary agents The abundance of research and development concerning local soybean production	Fluctuating price causing farmers' reluctance to cultivate soybean Competitiveness between corn and mung bean Soybean are not always available in the agriculture market, especially outside the industrial area The increasing price of soybean globally The incoming imported soybean with lower price The implementation of zero percent policy for imported soybean

The advantages from the soybean seeds business is expected to be able to support soybean cultivation within the level of farmers. However, this turns hopeless with the implementation of government policy regarding imported tariff custom of soybean. This policy causes the inability of local soybean to compete with imported soybean. Imported soybean has dominated 72% of national soybean market, hence making consumers and producers to opt for imports (Wulandari, 2017). This phenomenon will impact to the country's dependence on imported soybean and thus causing calamity if the global price is extremely high due to the plummeted stocks (Supadi, 2009).

The consumption of local soybean becomes the measure to control imported soybean. It supported by Sari (2015) in her research that Indonesian consumption of soybean is significantly influenced by imported soybean, income per capita and soybean price. This means that the amount of imported soybean will surge significantly alongside the level consumption of people. Based on the research done by Permadi (2015), it was described that the large harvest area impacts negatively to the imported soybean volume, hence the increase of harvesting area will decrease the volume of imports. This research is also supported by Suryana (2007) and Malian et. Al (2004) who stated that commodity production of food is affected significantly by the vast harvesting areas, which then influence the imports of the commodity.

Marketing Strategy of Soybean Seeds Germination

Soybean marketing can be the measure to increase production in Central Java. The high demand of soybean seedscan be a booster to farmers to become seeds entrepreneurs. Every year, farmers will need seeds at least two times for their plantation, especially within the central production areas such as Grobogan, Pati, Purworejo, Wonogiri and Sragen Regency. The overall demand of soybean in Indonesia is approximately 34.000 tons/years with the need for cultivation at around 48.500 ha, assuming each 1 ha producing 0,7 tons (Suastika, 2012). On the other hand, the demand of soybean seeds in Central Java is approximately 425 kg for 65.278 ha of plantation areas (Sutrisno, 2015).

The demand of soybean is not completely fulfilled by certified seeds, although the use of certified seeds will significantly contribute to the improvement of productivity (Ditjen Tanaman Pangan, 2015). Only 2% of farmers use quality soybean seeds (Suastika & Kariada, 2012). According to Baehaki (2002), less than 10% of farmers use prime seeds (certified) in which farmers generally use previous crops yield or their own crops and purchasing from sellers from crops by other areas based on the previous harvesting season. This situation is due to the unavailability of quality soybean seeds when needed and the distribution chain of seeds from the production center to farmers level is too far hence the quality of seeds has decreased.

Seed centers within soybean production center is one of the alternatives to tackle the problem of seeds unavailability. Grobogan Regency has begun to pioneer the establishment of seed center within these past years. Seed center is functioned as the center to manage the availability of seeds, develop and improve the quantity as well as quality of soybean seeds cultivated from entrepreneurs, and the center of education-based community or seeds entrepreneurs. It is expected that other production centers can establish similar seed center to support seeds germination center, service and seeds germination entrepreneurs and jabal soybean, quality control assistance for bulked soybean, stocks system assistance for soybean seeds and the assistance of soybean seeds demand (Distan KP Kabupaten Grobogan, 2017).

Market Strategy for Local Soybean Product

The core problem of national soybean production is the decrease of production level aside from the increase of soybean consumption. Soybean production is predicted to plummet to the average of 1,49% while the consumption of soybean will boom to the average of 1,73% (BPS, 2017). The increase of consumption within the country causes the increase volume of imports approximately 3,57% per year. The ending stock of soybean is relatively smaller, which is less than 2% toward the total supply and continuously

decreasing volume at around 4,25% per year (BPPP, 2014)

Some strategies based on SWOT analysis on local soybean markets are: (1) the policy to expand planting areas (PAT) that needs to be followed by the availability of seeds, (2) the needs of promotional body for local soybean to extract the potential of local soybean and educate the use of local soybean within people and industries, (3) purchasing in the production central from local government for local soybean processing industries, (4) the restriction of imported soybean to stimulate local soybean consumption, (5) pricing policy to be reevaluated and adjusted according the quality attribute (e.g. soybean-based tofu's price will be determined according to its protein content, and soybean for seeds is according to the level of dryness.

The promotional body for local soybean is necessary to enhance the potential as well as educate people in general. The information concerning the difference of local soybean and imported soybean can be one of the appeals as to why people resort to consume local soybean. According to Agung (2000), tempe produced from local soybean contains a higher and healthier content of nutrition and organoleptic, due to the antinutrient compounds contained in local soybean can significantly be reduced. On the other hand, according to the research by Badan Tenaga Nuklir Nasional (Batan), Harry Is Mulyana, appraised that transgenic nutrient content of imported soybean was lost due to the distribution process of soybean (Ozal, 2012). According to research done by Yuwono (2012), 10 varieties of local soybean that had been evaluated contained higher chemical properties compared to imported soybean.

Product socialization specifically local soybean processed products need to begin from the local government. The program of buying from the production central from the local government is part of the promotional strategy to improve the popularity of local soybean. The image of local soybean is deemed inferior in the eye of processing industries due to the high level of water (Budhi, 2010). Dinas Pertanian Kabupaten Grobogan has begun to establish what is called Rumah Kedelai (Soybean House) which functions as the promotional body for processed product based from local soybean (Balitkabi, 2017). The supply of local soybean within the processed product industries need to be enhanced to decrease imports and increase and boost farmers' interest in planting soybean. The dependence on imported soybean will increase the price of imported soybean that impacts on the higher price of the product itself, this condition will disturb national stability (Bubun, 2018).

Government needs to strive on competitive price of soybean to attract farmers on soybean cultivation. The measures that can be done is reevaluating the policy of soybean pricing. The pricing can be made by adjusting price based on its quality attribute, for example, the price of consumable soybean will be determined by the nutrients and the price of seeds is determined by the quality of dryness level. Nowadays, farmers still refer to the government regulation from Permendag No. 1 Year 2015 about Pricing and Purchasing Soybean by farmers in accordance to soybean price security within the level of farmers, in which the price stood at Rp. 7.700,-/kg. The reality shows that the price is in line with farmers' interest in cultivating the commodity. Damardjati et al. (2005) explained that unsuitable pricing is deemed to be the disincentive causing the decrease of soybean cultivation area. The lower price of imported soybean compared to local product also becomes the disincentive for farmers to contribute in soybean production. This condition heightens the drastic decrease of soybean plantation areas within the periode of 1990-2005 (Sudaryanto, 2016).

CONCLUSIONS

Information about problems and obstacles, as well as potential and opportunities of the markets of soybean in the production central of Central Java, both internal and external are divided into two focuses which are soybean for seeds germination and consumption. Based on the SWOT analysis, the main strategy as the alternative measures to increase soybean as seeds production and the development of local soybean to control imported soybean commodity are as follow: (1) the establishment of seed center to

control the availability of soybean to fulfill the demand in Central Java, in which the program also entails the development and improvement of quality and quantity of soybean produced by the producer, (2) the pricing mechanism of soybean adjusted according to the quality attributes, (3) the restriction of imported soybean to stimulate local cultivation, (4) the need of promotional means for local soybean within industries and community, (5) the education directed to farmers community and other means of coaching to obtain the best price for soybean, (6) the program of buying the product from production central by local governments for processed products based on local soybean.

REFERENCES

Abidin, Z dan Harnowo, D. 2014. Jurnal Pengkajian Dan Pengembangan Teknologi Pertanian 17(3):243–49.

Ari Agung, IGA. 2000. Pengaruh Pengasaman dan Lama Fermentasi dalam Pembuatan Tempe Kedelai terhadap Kadar Senyawa Antinutrisi Tanin dan Tingkat Kesukaan Konsumen (Tesis). Unair. Surabaya.

Badan Pengkajian Dan Pengembangan Kebijakan Perdagangan Kementerian Perdagangan.2014. Analisis Outlook Pangan 2015 – 2019. Pusat Kebijakan Perdagangan Dalam Negeri.http://bppp.kemendag.go.id/media_content/2017/08/Analisis_Outlook_Pangan_2015-2019.pdf. [Accessed in May 2018]

Badan Pusat Statistik Indonesia. 2017. Pengeluaran Untuk Konsumsi Penduduk Indonesia.

BBPPSLP. 2008. Potensi dan Ketersediaan Lahan untuk Pengembangan Kedelai di Indonesia. Balai Besar Penelitian dan Pengembangan Sumberdaya Lahan Pertanian. Warta Penelitian dan Pengembangan Pertanian30, 3–5.

Budhi, G.S. dan M. Aminah. 2010. Swasembada Kedelai antara Harapan dan Kenyataan. FAE, Pusat Analisis Sosial Ekonomi dan Kebijakan Pertanian, Bogor. 28(1):55-68.

Baehaki, A. 2002. Review pemuliaan tanaman dalam industri perbenihan di Indonesia. p. 1-6. Dalam: E. Murniati et al. (Eds.). Industri Benih di Indonesia: Aspek Penunjang Pengembangan. Laboratorium Ilmu dan Teknologi Benih, BDP-Faperta IPB, BogorBadan Pusat Statistik. 2017. Statistik Konsumsi.

Balitkabi. 2017. Rumah Kedelai Grobogan Promosikan Kedelai Lokal. http://balitkabi.litbang.pertanian.go.id/berita/rumah-kedelai-grobogan-promosikan-kedelai-lokal/. Accesed in 1 August 2018.

Balitkabi. 2012. Deskripsi Vaeietas Unggul Kacang-Kacangan dan Umbi-Umbian. Balai Penelitian Tanaman Kacang-Kacangan dan Umbi-Umbian. Kementerian Pertanian. Badan Penelitian dan Pengembangan Pertanian.

Bastuti, Tri Purwanti. 2014. Sistem Perbenihan Mendukung Keberlanjutan Produksi Kedelai di Jawa Tengah. Prosiding Hasil Penelitian Tanaman Aneka Kacang dan Umbi 2014. Balitkabi, Malang. (582-590).

Bubun, Sukardi, dan Ono Suparno. 2018. Kinerja Rantai Pasok Kedelai di Kabupaten Grobogan. Jurnal Aplikasi Manajemen dan Bisnis, Vol. 4 No. 1, January 2018

Budhi, Gelar Satya dan Mimin Aminah. 2010. Swasembada Kedelai: Antara Harapan dan Kenyataan Forum Penelitian Agro Ekonomo. Volume 28 No 1. July 2010 : 55 - 68.

Damardjati, D.S., Marwoto, D.K.S. Swastika, D.M. Arsyad, dan Y. Hilman. 2005. Prospek dan arah pengembangan agribisnis kedelai. Badan Litbang Pertanian. Departemen Pertanian, Jakarta.

Deptan. 2006. Arah dan Strategi Sistem Perbenihan Tanaman Nasional. Departemen Pertanian. Jakarta. 53p

Dinas Pertanian Tanaman Pangan Kabupaten Grobogan.https://rumahkedelaigrobogan.com/[Accessed in July 2018]

Direktorat Pasca Panen Tanaman Pangan. 2012. Rencana Strategi Direktorat Pasca Panen Tanaman Pangan. Direktorat Pasca Panen Tanaman Pangan. Direktorat Jenderal Tanaman Pangan. Kementerian Pertanian.2012

Ditjen Tanaman Pangan. 2015. Pedoman Teknis Pemberdayaan Penangkar Benih Tahun Anggaran 2015. Jakarta.

Fachruddin, Lisdiana, Ir. 2000. Budidaya Kacang – Kacangan. Penerbit Kanisius, Yogyakarta.

Harnowo Didik, J. Rachman Hidajat , dan Suyamto. 2016. Kebutuhan dan Teknologi Produksi Benih Kedelai. Kedelai: Teknik Produksi dan Pengembangan : 383 – 415. http://balitkabi.litbang.pertanian.go.id/wp-content/uploads/2016/03/dele_17.didikh-1.pdf [accesse in 9 May 2018]

Hartawan, Rudi dan Edy Marwan. Model Distribusi Benih Kedelai Label Biru Dengan Sistem Jabalsim Dan Jabalsim Terkendali Di Kabupaten Tanjung Jabung Timur. Jurnal

Media Pertanian Vol. 2 No. 2 Year 2017: 73 – 84.

Badan Pengkajian Dan Pengembangan Kebijakan Perdagangan (BPPP). 2014.

Nugraha, U.S., H. Smalders, and N Saleh. 1995. Seed quality of secundery food crops in Indonesia. Paper at the Workshop on Integrated Seed Systems

Marwoto dan Y Hilman. 2005. Teknologi Kacang – Kacangan dan Umbi-umbian Mendukung Ketahanan Pangan. Kinerja Balai Penelitian Kacang – Kacangan dan Umbi – Umbian 2003 – 2004. Balitkabi. Malang. 20 hlm.

Ozal, Dimasyq.2012. Ini Perbedaan Kedelai Lokal dengan Impor. Kompas, 2012. Hal/Kol : Sumber: Senin, 13 Agustus 2012 www.kompas.com http://bisniskeuangan.kompas.com/read/2012/08/13/10071160/Ini.Perbedaan.Kedelai.Lokal.dengan.Impor.

Pusdatin. 2016. Outlook Komoditas Subsektor Tanaman Pangan Kedelai. 2015. Pusat Data dan Sistem Informasi Pertanian. Kementerian Pertanian.

Permadi, Galih satria. 2015. Analisis Permintaan Impor Kedelai Indonesia. Jurnal ekonomi Regional Volume 10 No 1. Maret 2015: 23 – 30.

Purba, Resmayeti. 2012. Peluang Pengembangan Penangkar Kedelai Di Banten. Prosiding Seminar Hasil Penelitian Tanaman Aneka Kacang dan Umbi 2012: 668 – 672.

Rangkuti, Freddy. 2005. Analisis SWOT: Teknik Membedah Kasus Bisnis -Orientasi Konsep Perencanaan Strategis Untuk Menghadapi Abad 21. Jakarta:PT. Gramedia Pustaka Utama .

Rante Y. 2013. Strategi Pengembangan Tanaman Kedelai Untuk Pemberdayaan Ekonomi Rakyat Di Kabupaten Keerom Provinsi Papua. Jurnal Manajemen Dan Kewirausahaan, Vol.15, NO. 1, MARET 2013: 75-88.

Rasyid, Harun.2013. Peningkatan Produksi Dan Mutu Benih Kedelai Varietas Hitam Unggul Nasional Sebagai Fungsi Jarak Tanam Dan Pemberian Dosis Pupuk P. Jurnal Gamma. Maret 2013 : 46 - 63 .

Saleh, Nasir. 2008. Penggunaan Benih Sehat sebagai Sarana Utama Optimasi Pencapaian Produktivitas Kedelai. Iptek Tanaman Pangan Vol. 3 No. 2 – 2008: 229 – 243. http://pangan.litbang.pertanian.go.id/files/vol-3-no-2-09-nasir.pdf.

Sari, Putri Meliza, hasdi Almon, Efrizal Sofyan. Analisis Faktor – Faktor Yang Mempengaruhi Produksi, Konsumsi dan Impor Kedelai. 2015. Jurnal Kajian Ekonomi. Juli Vol III No 5.

Suardana, I Ketut, I Gusti Agung Ayu Ambarwati dan I Dewa Putu Oka Suardi. 2016. Analisis Usahatani Penangkaran benih Kedelai. Ejurnal Agribisnis dan Agrowisata. Volume 5 No 1. Januari 2016 : 1 – 9.

Suastika, I.B. dan I.K. Kariada. 2012. Kajian sistem penyediaan benih unggul bermutu kedelaI dalam mendukung program strategis peningkatan produksi kedelai di wilayah Bali. Pros. Seminar Kedaulatan Pangan dan Energi Universitas Trunojoyo Madura.

Sudaryanto, T., I.W. Rusastra dan Saptana. 2001. Perspektif Ekonomi Kedelai di Indonesia. FAE, Pusat Penelitian dan Pengembangan Sosial Ekonomi Pertanian, Bogor. 19(1):1-20.

Sudaryanto, Taslim dan Dewa K.S. Swastika. 2016. Ekonomi Kedelai di Indonesia. Pusat Analisis Sosial-Ekonomi dan Kebijakan Pertanian, Bogor. http://balitkabi.litbang.pertanian.go.id/wpcontent/uploads/2016/03/dele_1.tahlim-1.pdf. [accessed in 1 Agustus 2018].

Supadi. 2009. Dampak Impor Kedelai Berkelanjutan Terhadap Ketahanan Pangan. Analisis Kebijakan Pertanian. Volume 7 No. 1, Maret 2009 : 87-102..

Sutrisno, Imam, Eny Hari Widowati, dan Fahrur Rozi. 2015. Optimalisasi Sistem Jabalsim Dalam Memenuhi Kebutuhan Benih di Jawa Tengah. Prosiding Seminar Hasil Penelitian Tanaman Aneka Kacang dan Umbi: 386 – 393.

Suyato. 2011. Revitalisasi Sistem Perbenihan Tanaman Pangan. Jurnal Iptek Tanaman Pangan. Vol 6 (1): 1 – 13.

Wulandari, Susi Sinta. 2017. Kebijakan Pemerintah Indonesia Dalam Melindungi Petani Lokal Dari Ancaman Impor Kedelai Amerika Serikat Tahun 2012-2016. Jom Fisip Vol. 4 No. 2 – Oktober 2017: 2 – 15.

Yuwono, Fraksi Sudarminto Setyo, Kartika Ken Hayati dan Siti Narsito Wulan. 2012. Karakterisasi Fisik, Kimia Dan Fraksi Protein 7s Dan 11s Sepuluh Varietas Kedelai Produksi Indonesia. Jurnal Tek. Pert. Vol 4(1): 84 - 90

Zakaria, Amar K. 2010. Kebijakan Pengembangan Budidaya Kedelai Menuju Swasembada Melalui Partisipasi Petani Jurnal Litbang Pertanian, 29(4), 2010: 147 - 153.

Yoko, B., Syaukat, Y. dan Fariyanti, A. 2014. "Analisis Efisiensi Usahatani Padi di Kabupaten Lampung Tengah". Jurnal Agribisnis Indonesia, 2(2): 127